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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/829,336	04/22/2004	Shao-Hsian Hsu	MR2561-151	6814
4586	7590	08/09/2007	EXAMINER	
ROSENBERG, KLEIN & LEE			LEE, BETTY E	
3458 ELLICOTT CENTER DRIVE-SUITE 101				
ELLICOTT CITY, MD 21043			ART UNIT	PAPER NUMBER
			2616	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	10/829,336	HSU ET AL.
	<b>Examiner</b>	<b>Art Unit</b>
	Betty Lee	2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 22 April 2004.  
 2a) This action is FINAL.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-8 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1-8 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on 22 April 2004 is/are: a) accepted or b) objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) Notice of References Cited (PTO-892)  
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  
 3) Information Disclosure Statement(s) (PTO/SB/08)  
     Paper No(s)/Mail Date \_\_\_\_\_

4) Interview Summary (PTO-413)  
     Paper No(s)/Mail Date. \_\_\_\_\_

5) Notice of Informal Patent Application  
 6) Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Drawings***

1. The drawings are objected to because the unlabeled rectangular boxes shown in Figures 1 and 2 should be provided with descriptive text labels. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Objections***

2. Claims 6-8 are objected to because of the following informalities:

Claim 6 lines 2-3 recites "an internal storage controller, an storage device, an internal storage controller and an external storage device". "An internal storage controller" is listed twice. It is suggested Applicant remove second occurrence of "internal storage controller".

Claim 8 line 4 recites "IEEE 802.22b/g interface". It suggested that "IEEE 802.22b/g interface" be changed to --- IEEE 802.11b/g interface ---.

Claim 7 is objected to as being dependent on an objected base claim.  
Appropriate correction is required.

#### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:  

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
4. **Claims 4 and 5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.**

Claim 4 lines 1-2 recite "said processor could be a central processor unit (CPU)".  
The term "could" does not positively recite the claim limitations following it.

Claim 5 lines 1-2 recite "said antenna is one of the following: a format of exposed outside a shell of the router and hided inside the shell of the router". It is unclear what a "format of exposed outside a shell of the router" is. It is also suggested that "hided" be changed to --- hidden ---.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1 and 3-5 are rejected under 35 U.S.C. 102(b) as being anticipated by Tymes (US 5,029,183).

**Regarding claim 1,** Tymes teaches a ROM configured to store programs when operating hardware related to the programs (see Fig. 3 Box 31); a RAM configured to provide an area for temporarily storing processing data (see Fig. 3 Box 31); a processor configured to connect with an external network to transmit and receive data (see Fig. 3 Box 30); and a wireless card configured to switch format of transmitted data and transmit and receive data by means of an antenna (see Fig. 3 Box 34).

**Regarding claim 3,** Tymes teaches the ROM is one of the following: flash ROM, EPROM, and EEPROM (see col. 7 lines 13-15).

**Regarding claim 4,** Tymes teaches the processor is a CPU (see Fig. 3 Box 30).

**Regarding claim 5,** Tymes teaches the antenna is one of the following: a format of exposed outside a shell of the router (see Fig. 3 Box 35) and hidden inside the shell of the router (see Fig. 3 Box 34).

7. Claims 1 and 6-8 are rejected under 35 U.S.C. 102(e) as being anticipated by Holder (US 2003/02/06542).

**Regarding claim 1**, Holder teaches a ROM configured to store programs when operating hardware related to the programs (see Fig. 2 Box 201); a RAM configured to provide an area for temporarily storing processing data (see Fig. 2 Box 201); a processor configured to connect with an external network to transmit and receive data (see Fig. 2 Box 206); and a wireless card configured to switch format of transmitted data and transmit and receive data by means of an antenna (see Fig. 2 Box 207).

**Regarding claim 6**, Holder teaches an internal storage controller (see Fig. 2 Box 201), an internal storage device (see Fig. 2 Box 201), and an external storage device (see Fig. 2 Box 204).

**Regarding claim 7**, Holder teaches the internal storage controller is one of the following interfaces to control the internal storage device an integrated device electronic (IDE) interface, an IEEE 1394 interface and a universal serial bus (USB) interface (see Fig. 2 Box 201 and 204).

**Regarding claim 8**, Holder teaches the external storage controller is one of the following interfaces to control the external storage device : an 1394 interface, a USB interface, an IR interface, a RF interface and an IEEE 802.11b/g interface (see Fig. 1 Box 103).

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

10. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

11. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Holder (US 2003/0206542) in view of Anandakumar et al. (US 6,574,213).

**Regarding claim 2,** Holder teaches all the subject matter of the claimed invention with the exception of specific types of RAM. However, Anandakumar teaches the RAM is one of the following: SDRAM, DDR RAM, RDRAM, and SLDRAM (see col. 41 lines 13-19). Thus, it would have been obvious to one of ordinary skill in the art to use the system of Anandakumar in the system of Holder. The motivation for doing so is to enhance convenience by using industry-accepted types of RAM.

### ***Conclusion***

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Fillebrown et al. (US 2001/0053134) is cited to show a system which is considered pertinent to the claimed invention.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Betty Lee whose telephone number is (571) 270-1412. The examiner can normally be reached on Monday-Thursday 9-5 EST and alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on (571) 272-3088. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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